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VOLUME XXVIII MAY, 1929 NUMBER 5

SOME FRONTIER CONDITIONS IN THE HILLY PORTION OF THE OZARKS

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INTRODUCTION

Has our American frontier disappeared? If not, where do we find it? In one sense the American frontier has vanished; in another it still remains. In the early meaning of the frontier—a zone of sparse population of hunters and farmers ever driving westward—that phase of American life has long passed. But if we use as our criterion degree of advancement, many small areas are to be found that typify our early frontier life. These localities are not necessarily the historically new parts of our land. They are found in northern New England, farther south in the Appalachian Highland, and in a limited portion of the Ozark region. The principal part of this particular section of the Ozarks is located in the central part of southern Missouri, and comprises Ozark, Taney, and Douglas counties. However, the same conditions prevail in adjacent parts of other counties of Missouri and northern Arkansas.

It is with this last named region that this discussion deals, a region settled as early as 1732, and where, in many respects, customs of 1732 still persist with but slight modifications.

FARM LIFE

General farming is the rule, and the average farm is surprisingly self-supporting. It has a small crop of wheat to supplement the corn for bread. Potatoes, garden vegetables for summer (and often cabbage, radishes, and turnips kept in cellars or "holed up" for winter use), field beans, home grown pork and an occasional "yearlin'" (one year old calf), and butter and milk make up the principal part of the diet. On special occasions fried chicken or eggs may be added. The two latter, however, are usually consid-

ered rather expensive for home use, and these are more often marketed. An orchard supplies the fruit, unless a late spring frost appears, and a "patch" of sorghum, the molasses. Berries are gathered from an abandoned field, nuts and grapes from the forest. Wild game is shot or trapped, to add to the home-grown meat supply.

Expenses are kept to the minimum by home industry. The spinning-wheel and the hand-loom, to a lesser extent, play their part. A portion of the wool sheared from the home flock is reserved for home use. This the housewife spins into yarn, and many of her long fireside evenings are given to the knitting of socks, stockings,

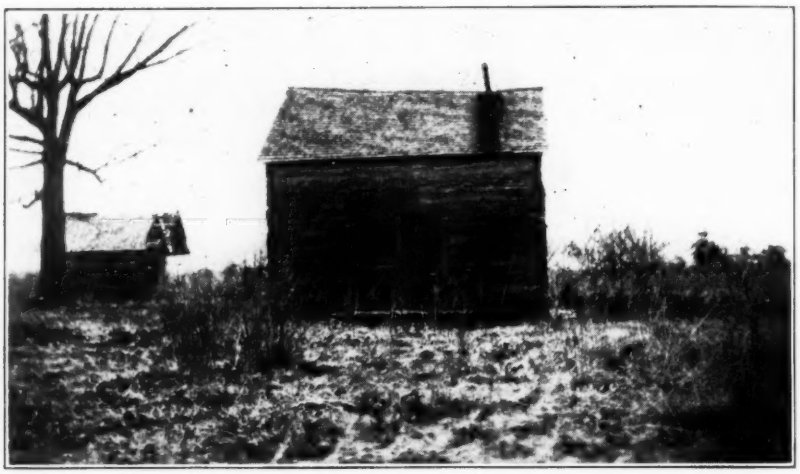

FIG. 1. Pioneer type of home still in common use

and "mittens." Blankets and carpets are often woven, and rugs are plaited from strips of discarded clothing. The man of the family, not to be outdone, adds his bit to the domestic economy by repairing his plows and wagon or making hoe handles, often of lumber or from hewn out pieces of timber from his own forest. He also tans squirrel and cat skins, and possibly a goat skin, from which are cut leather lacings and shoe "strings." He feels himself fortunate to get a skin of a "ground hog" (wood chuck), for it makes long, pliable laces.

Some of the large fixtures about the farm are also products of home industry. It is not uncommon for the farm buildings to be of home forest materials, either of logs as taken from the forest or of lumber from the same source cut by a small mill that has

been moved in to saw for the neighborhood. Shingles and boards for covering the buildings are even more often made at home. Usually these are split out by hand; more rarely they are sawed by a shingle mill. When erecting the buildings, the carpenter bill is very often saved by a gathering of the neighbors (a "working"). Also, occasionally the farmer will have a scant set of blacksmith tools for doing some of his and perhaps some of his neighbor's metal repairing, but these are more often limited to the villages.

The farm work is done largely in the open part of the year, April 1 to October 15. Spring work consists of plowing the land and planting corn and perhaps a few oats, and repairing the rail fences. The summer work begins with corn "plowing"; next comes wheat harvest (done with the old cradle), closely followed by hay cutting, if this crop is grown. From the latter part of July till the first of September a lax season exists, usually broken into a few days by the annual visit of the threshing machine.

The fall work requires only a few weeks, but it is a rather busy period. The housewife is one of the busiest, for she is anxious to lay up a supply of dried and canned fruits for the whole year. The men's work consists of corn cutting, done by hand, sowing the wheat and probably some rye, and making molasses.

The farm may have its own mill for making the molasses, or the sorghum may be hauled a few miles to a neighbor who makes it for one-third. The mills are small in size, but serve the needs very well; since the average crop will require only two or three days for making.

Following the fall season is a long period of more or less idleness. The farm stock are to be cared for and fed and a small "patch" may be cleared on the hillside for corn or sorghum, however the farmer is usually indifferent as to whether much or little is cleared. A few rails are to be split and some fences to be repaired, but that is not needed till springtime. All these can be easily laid aside if a good hunting day appears; or for several days if a trip to a better hunting locality is planned. When there is a good fall of snow hunting comes first; since that is the great time for rabbits. If the snow is too deep for rabbits to run well, it is not uncommon for two persons to catch twelve or fifteen in a half-day. Snow is also the time for hunting the few wild turkeys, but the hunter is not altogether discouraged if he hunts all day without getting one.

STOCK RAISING

Everyone has access to land not under fence, or free range as it is called, and much of the stock raised is pastured on this land in the open part of the year. The farmer usually raises a few of the rougher type of beef cattle, which he often keeps one, two, or even three years before selling. These are grown with as little expense as possible—"roughed" thru the winter season, hurried out to range as soon as the leaves and scant grass begin to appear, and let stay till driven in by the cold weather. About all the attention that is given them, while on the range, is to hunt them up occasionally, count and salt them. He may drive them in once in the spring

FIG. 3. Some of the out-buildings. Note the rail fence and the barn of logs and lumber from the home forest, covered with hand-split shingles

or fall for dehorning. In order to identify his cattle the farmer has a certain ear mark—a "fork," a "crop," or a "hole," or he may place a brand on the hip, or, very rarely, a label in the ear. By fall time these animals have taken on a sleek, fat appearance and are fair sellers on the market without further feed.

Sheep and goat raising is very similar to that of cattle, save that the sheep owner is in constant fear lest dogs, and in some cases wolves, play havoc with the flock. Sheep are raised for three purposes: wool to sell, lambs and older culls to sell, and a small portion of the wool for home use. Not many sheep are killed for home use, for it seems the majority of the people do not care for this meat. A few goats are raised, in scattered areas. Occasion-

ally they are kept to free pasture lands of undesirable plant growths.

Forest range is becoming scant, due to over grazing in some instances, but more especially from being choked out by the dense undergrowth which is springing up; however abandoned farms offer a good deal of short tho fair grazing. A variety of grass, locally called prairie grass, furnishes most of the forest grass, and Japanese clover largely that of old fields. Often the forest is burned over in attempting to preserve the grass. As a rule this has little of the desired effect; in many instances the young growth seems to become heavier.

FIG. 3. Corn in the foreground, sorghum for feed in the rear grown among deadened timber

Hog raising is quite universal; since it is the main source of the home meat supply. In some respects this is the most interesting phase of the livestock industry. There are the "lean" years and the "fat" years, but not from lack of flood waters as in ancient Egypt, for the quantity of mast (referred to as "acorn crop") determines which it shall be. If the mast is plentiful, the pigs grow fat and an abundant supply of meat is to be had directly from the forest with several "shoats" to take to market; if the mast fails, the pigs must be fattened from the ordinarily scant corn supply. The result in many cases is a rather scant meat supply, probably with none to sell, unless merely to get rid of the surplus hogs without any attempt at fattening them. In the sum-

mer season hogs are let run on pasture, either on the range or some part of the farm, and the gathered food supplemented by refuse from the kitchen and certain weeds from the garden and potato patch. Scarcely if ever do we find clovers or vetches sown for pasture.

In winters of no mast, hogs that are kept are necessarily fed some grain, but ordinarily only enough to tide them over. When the mast is good, the hog industry takes on a very different aspect. Plenty of food is to be found in the forest and the hogs adopt the forest life almost altogether. About all the owner sees of them is when he carries a few ears of corn to the ranging grounds to feed them; so they will not become too wild. On a still morning it is not uncomon to hear some farmer in the forest calling his hogs with a long drawn out "pig-o-e." If the hogs are neglected they sometimes become very wild and even vicious when chased down. Small pigs on the range are especially wild and about as vicious as wild animals. It is real sport to catch such pigs. Often advantage is taken of snow for tracking and chasing them down.

General Conditions

General conditions thru the country are similar in backwardness to that of other phases of life referred to above. Due to rough topography and its limited amount of products available for shipment, railroads have avoided the whole region save where lines cross as connecting links between other regions. One of the counties mentioned has no railroad at all, another has only a spur some fifteen miles in length, and other near-by counties have but a few miles each. In many instances rural markets are located twenty or more miles from railway stations. As a result produce collected from the farms and shipped-in goods must be hauled in wagons for long distances. In most cases the roads are full of stones, and the hills and slopes are further marred by water-washed gullies. Much of the travel and traffic is carried on over routes which may be classed as trails rather than roads. These roadways are often very crooked; since they follow small valleys or meander among the hills in order to avoid steep grades.

The inland trading centers are usually some five miles apart. Of these a village consisting in the main of four or five stores, a post office, and a blacksmith shop is typical; more often, trading places consist of one or two stores located at road crossings.

Towns of a few hundred are exceptions rather than the rule. The stocks of goods handled are necessarily very general; since the respective communities depend on local merchants for most commodities purchased. However, mail order houses are patronized to a limited extent, and in rare instances rather extensively.

These conditions naturally result in little contact with the outside world. Some of the inhabitants rarely travel beyond the confines of the county in which they live. In 1923 a railway station agent of Springfield, Missouri, stated that a family consisting of the father, mother, and five children came into that town on their way to Oklahoma, and that none of the group had ever seen

FIG. 4. Forest range of the more open type.

a train. Of course this is an extreme case, but it is not unusual for children of ten or twelve years of age never to have seen trains.

The mail, carried in on horses or in buggies, relieves the monotony to a certain extent. It is brought to the postoffices daily, but the only individual delivery is along the routes between the offices. People who live near the routes usually fix boxes at convenient places in which the carrier deposits their mail as he passes.

Educational opportunities are also rather limited. The rural schools in some cases are conducted only four or five months each year, but more often for six months or longer. Some schools have eight-months terms regularly. School laws specify regular attendance, however, public sentiment permits laxity of enforcement. Many of the children never complete the grade school work, and

very few attend secondary schools save those who live in the towns. Until recent educational laws were enacted a large percentage of rural teachers had never studied beyond the grade school. At present it is frequently necessary to secure teachers from considerable distance in order to fulfill requirements. State regulations are not always complied with in this matter. Education among older people particularly is low. It is not impossible to find individuals who do not attempt either to read, or write their names. Reading materials in the home as a rule are scarce. A small number of well-worn books, a few of the less expensive magazines, a weekly or a semi-weekly newspaper, and one or more mail order catalogs make up an average home supply of reading matter.

SUMMARY

The Ozarks is one of our few remaining "scars" (retarded frontiers) in which conditions similar to early frontier life still exist. By practicing general farming the people manage to be largely self-supporting. Phases of the old domestic system of manufacturing are to be found. Vegetables and fruits grown on the farm and meats, produced largely from the forest range, supply the greater food demands. Hogs produce the principal part of the meat supply; they also offer an interesting phase of the livestock industry. The seasonal farm work is done by somewhat primitive methods. Farm conditions as a whole approach the easy-going type of life.

General conditions thru the country are equally backward. Railroads are scarce, and roads in many instances are little better than trails. Small, general stores, supplemented to a certain extent by patronage of mail order houses, supply the demands for commodities outside of home production. Little contact is had with the outside world, but mail service is a factor in relieving the monotony. Education is backward. Public schools are not of the best, and the majority of the students never attend school beyond the grades. The home library usually contains only a scant supply of less expensive materials.

A CATALOG STUDY OF GEOGRAPHY IN EDUCATIONAL INSTITUTIONS ABOVE THE HIGH SCHOOL

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That geography is being assigned in educational institutions above the high school a more conspicuous place than was formerly accorded it is obvious from a comparison of current college catalogs with those issued a few years ago. But just what is geography's place in the higher institutions today? A desire to learn the answer to this question prompted the investigation which culminated in the study, a summary of which is here presented.

The materials used in this attempt to appraise the status of geography in higher institutions consist of a random selection of catalogs which announce and describe courses offered during the academic year of 1927-1928 and give enrollment statistics for 1926-1927. Data here assembled represent 398 different institutions in all parts of the country. These institutions range in enrollment from forty-seven to 13,392 and have a median enrollment of 494. Of these institutions 322 are four-year, degree-granting colleges or universities, sixty-two are normal schools or teachers colleges, and fourteen are junior colleges.

It has sometimes been difficult to draw an exact line between courses which belong in the category of geography and those which do not. Courses listed in the catalogs as geography are included as geography in this study, but it has often been perplexing to determine whether or not to list certain geology and economics courses with geography. It was finally decided, however, to include general elementary geology courses. This conclusion of elementary geology courses with geography is open to criticism, particularly on the ground that, altho in such courses the surface of the earth may be considered, the relationship between the earth and the life upon it which is characteristic of geography, may be ignored. However, there seems to be practical justification for the inclusion since some institutions require beginning geology as a prerequisite to courses in geography and some do not grant full credit to students taking both geology and geography because of the overlapping of subject matter.

In the fields of economic and commercial geography it has also been sometimes difficult to distinguish exactly between subjects which should be classified as geography and those which should not. If a course is called geography in the catalog of the institution offering the course, it is included in this classification without question altho this procedure may not always be consistent. Thus one college may call such a course as Ocean Trade and Transportation "geography" and require geography prerequisites, whereas another institution may list such a course under economics and require no previous instruction in geography but rather require as prerequisites courses in marketing and foreign exchange.

Where the department placement gives no cue as to geographic content of courses, doubtful courses have been placed in this geography classification only when, according to the dictionary definition of geography, their titles and catalog descriptions seemingly justify such placement. Many different definitions of geography are current, but the one here used as a criterion is that given in Funk and Wagnalls Standard Dictionary, "The science that describes the surface of the earth, with its peoples and products."

A course which extends over more than one semester or quarter is here listed as one course, and courses which are repeated in consecutive semesters or quarters are considered as one course. No consideration is here given geography work offered in summer sessions, in extension divisions, by correspondence, or in any other way than in the regular fall and spring semesters or the fall, winter, and spring quarters. These exclusions preclude consideration of many interesting courses in geography, but it is hoped that the exclusions will assist in presenting more accurately the prevailing status of geography in the regular collegiate sessions.

DEPARTMENTAL PLACEMENT OF GEOGRAPHY COURSES

Of the 398 institutions represented in this study, 319 offer one or more courses in geography. Seventy-nine, or nearly 20 per cent, give no work whatsoever in geography. Courses are offered under sixty different catalog headings or departments. Some institutions offer geography under more than one department or so-called department. This great variation in departmental placement seems indicative of slight uniformity in the administration of

geography courses as well as of the abundance of geographic material which makes feasible placing the subject in so many different places in the curriculum.

The following table sets forth the various headings under which geography courses are listed by the 319 higher institutions included in this survey which offer such work, and also tells the frequency of occurrence of these headings.

CATALOG HEADINGS UNDER WHICH GEOGRAPHY COURSES ARE LISTED, WITH FREQUENCY OF OCCURRENCE

Catalog Heading	*Frequency of Occurrence*
Geology	148
Geography	41
Economics	31
Education	29
Geology and Geography, or Geography and Geology	24
Social Science	13
Commerce	11
Science	11
Biology and Geology	8
Economics and Business Administration	8
Biology	7
Business Administration	7
Economics and Sociology	7
Geology and Mineralogy	5
Natural Science	4
Agriculture	3
Business	3
Chemistry and Geology	3
Commerce and Economics	3
Secretarial Science	3
Secretarial Studies	3
Agricultural Economics	2
Agronomy	2
Chemistry	2
Forestry	2
Geology and Botany	2
Geology, Geography, and Mineralogy	2
History and Geography	2
Physical and Natural Sciences	2
Physics and Geology	2
Social Science and History	2
Other catalog headings appearing once only	29

SUBJECT MATTER OF COURSES AS SUGGESTED BY COURSE TITLES

Titles of geography courses announced by catalogs of the higher institutions represented in this study are for convenience

arbitrarily grouped under twelve heads representing various phases of geography. These divisions are not mutually exclusive but represent an attempt to classify courses according to their content. These headings under which course titles are listed are in the following table, together with summaries of the number of course titles and courses under each heading.

SUMMARY OF COURSES AND TITLES

Course Content	*Number of Course Titles*	*Number of Courses*
Geology and Physiography	38	406
Economic and Commercial Geography	63	272
Regional Geography	68	234
Teaching of Geography	58	128
General Geography	14	97
Human Geography	18	61
Weather and Climate	14	58
Historical and Political Geography	27	53
Research Courses and Seminars	16	27
Cartography, Mathematical Geography	11	22
Field Geography	6	15
Miscellaneous Geography Courses	6	7
Total	339	1,380

The inclusion of courses in elementary geology in this survey places a strong emphasis upon courses dealing with the morphology of the earth for of the 406 courses in geology and physiography, 198 are entitled Geology or General Geology. Thirty-eight are Physical Geology and sixteen are Dynamic and Structural Geology. Seventy-six of the courses are entitled Physiography and thirteen Physical Geography. Sixteen of the courses in this general group deal with the physiography of particular regions.

In the field of economic and commercial geography, the following summary gives some idea of course titles most frequently found.

Course Title	*Frequency of Occurrence*
Economic Geography	86
Commercial Geography, or Geography of Commerce	33
Conservation of Natural Resources	26
Industrial and Commercial Geography	18
Industrial Geography	10
Agricultural Geography	8
Economic Resources	7

Course Title	*Frequency of Occurrence*
Business Geography	6
Economic and Commercial Geography	6
Economic Geography of the United States	6
Commerce and Industry	3
Economic Geography of North America	3
Geography of Trade	3
Other course titles appearing twice only	14
Other course titles appearing once only	43
Total	272

Excluding the courses dealing with the morphology of land forms, the greatest number of courses in the field of geography deal with economic aspects of the subject.

In the study of particular regions, sixty-eight different course titles and 234 courses appear. Forty-nine different course titles appear once only and generally are titles of courses in the geography of certain states or limited regions. Fifty-two courses are given on the geography of North America, forty-two on the geography of Europe, twenty-seven on South America and eleven on Latin America, ten on Asia, and five on the United States. Eleven courses are entitled Regional Geography and deal with natural regions in various parts of the world.

Courses in the teaching of geography are much more frequently found in the teachers colleges and normal schools than in liberal arts colleges and universities, altho they are found also in the latter types of institutions. Fifty-eight different course titles and 128 courses in various phases of the teaching of geography are listed by the higher schools represented in this survey. Content and method are frequently combined. The following summary gives some idea of the subject matter of the 128 courses:

General Courses for Teachers	67
Courses of Elementary Teachers	45
Courses for Secondary School Teachers	15
Courses for Teachers in Higher Schools	1
Total Number of Courses in the Teaching of Geography	128

Titles of courses reflect also the tendency for general courses and those for elementary teachers to outnumber courses for teachers in secondary schools and higher institutions, as indicated by the following summary:

General Courses for Teachers	26
For Elementary Teachers	22
For Secondary School Teachers	9
For Teachers in Higher Schools	1
Total Number of Course Titles in the Teaching of Geography	58

In the subdivision here called General Geography there are fourteen different course titles and ninety-seven different courses. Generally the subject matter of these general courses is basic for subsequent work. Thus seventy-two of the ninety-seven courses are called either Elements, Essentials, or Principles of Geography, and two are called Introductory Geography. Four courses are termed Modern Geography.

Thirty-eight of the 61 courses here classified as Human Geography have that name in the catalogs and but two the less simple title of Principles of Anthropogeography. The other courses in this category deal with various phases of man's adaptation to his geographic environment.

The 319 institutions of this survey which give work in geography give fifty-eight different courses dealing with weather and climate under fourteen different course titles. Twenty-seven of these courses are called Meteorology, fourteen are called Climatology, three are Meteorology and Climatology, three are called Weather and Climate, and two are entitled Climates of the World. Nine different titles occur once only.

Much of the content of courses here classified as Regional, Economic, or Human Geography is undoubtedly also historical and political, but fifty-three courses and twenty-seven titles announce courses distinctly in the field of Historical and Political Geography, hence are so classified. Sixteen of these courses appear once only and generally treat the historical and political geography of restricted regions as the Lower South, the New England States, or the Holy Land. The most popular subject in this field, however, deals with geographic influences in American history, as the following summary indicates.

Titles of Courses in Historical and Political Geography	*Frequency of Occurrence*
Geographic Influences in American History	16
Political Geography	8
Historical Geography of the United States	5

Titles of Courses in Historical and Political Geography	*Frequency of Occurrence*
Current Geography	2
Current Problems in Political Geography	2
Political Geography of Europe	2
Historical Geography	2
Titles appearing once only	16

Twenty-seven research courses and seminars are offered by the higher schools whose catalogs comprise the materials for this survey. Seven of these courses are entitled Research, but most of them are seminars dealing with definitely announced fields. Sixteen different titles of research courses and seminars appear.

Twenty-two courses are given in Cartography and Mathematical Geography under eleven different titles. Eight courses are in Maps and Map Interpretation, five are entitled Cartography, and two are Mathematical Geography. Seven different courses each appear once only.

Fifteen field courses are given by the higher schools studied. Ten of these courses are called simply Field Geography and five have special names as Advanced Field Courses, or Field Courses for Teachers.

The seven courses here grouped under miscellaneous courses have six different titles. Two of these courses deal with the philosophy of geography, two with the literature of geography, and one with the history of geography.

The preceding data are summarized in the following recapitulation:

Number of institutions represented in this study	398
Number of these institutions offering geography (including elementary geology)	319
Catalog headings under which geography is listed	60
Total number of geography course titles	339
Total number of geography courses (including 267 courses in elementary geology)	1,380

NUMBER OF COURSES OFFERED BY THE VARIOUS INSTITUTIONS

Geography is in the curricula of 319 or 80 per cent of the 398 institutions whose catalogs form the basis of this study. For the entire group of 398, the average number of geography courses (including elementary geology) is 3.5. For the 319 colleges offering some work in geography, the average number of courses is 4.3. Omitting 267 courses which might more properly be called geology than geography, the average number of courses given by each of

the 398 higher schools is 2.8 and the average number given by the 319 actually giving such work is 3.5. It is thus obvious that geography has a generally accepted place in the curricula of collegiate institutions. That this place is not always clearly defined is evident from the variety of catalog headings and course titles under which geographic subjects are listed. But this variety is proof also of the wealth of geographic material which makes such dispersion possible, and is suggestive of the rôle geography plays in contributing to an understanding of other subjects.

The table which follows summarizes the number of courses given in all of the institutions included in this investigation.

GEOGRAPHY COURSES OFFERED BY INSTITUTIONS WHOSE CATALOGS WERE STUDIED

Number of Geography Courses Listed	*Number of Institutions Offering These Courses*	*Total Number of Courses*
0	79	0
1	111	111
2	56	112
3	44	132
4	18	72
5	18	90
6	15	90
7	9	63
8	9	72
9	3	27
10	3	30
11	4	44
12	2	24
13	2	26
14	2	28
15	3	45
16	4	48
17	4	68
18	2	36
19	2	38
22	3	66
24	2	48
31	1	31
34	1	34
45	1	45
Total number of institutions	398	Total number of courses 1,380

REQUIREMENTS AND CREDITS

There are not always prerequisites to geography courses, and when prerequisites are named, they are not uniform in the various

colleges. In institutions allowing a major in geography, there seems to be a tendency for geology to be required as a basic course for geography majors. Commercial or economic geography is frequently prescribed for commerce majors. A few colleges recommend the election of human geography by sociology majors. Some colleges require students taking elementary physiography to have a knowledge of physics, chemistry, and biology. One state university recommends Greek for majors in geography or geology. Several colleges require freshmen to take orientation courses whose content is largely geographic. Such courses are sometimes entitled "Man's Place in Nature" and are designed to give students a general knowledge of the universe and man's place in it. One college prescribes an introductory course in earth science for all regular students.

Some of the institutions whose catalogs were studied, particularly some of the large universities, have in geography, as in all departments, definite distinctions between lower and upper division courses. This distinction, however, is by no means universal, altho some colleges grant less credit to juniors and seniors enrolled for lower division work than to freshmen and sophomores.

Methods of computing credit are not uniform but there seems to be a general tendency for the more elementary geography courses to carry three semester or five quarter units of credit. Little apparent uniformity exists in credit allowed for advanced courses.

GEOGRAPHY COURSES IN NORMAL SCHOOLS AND TEACHERS COLLEGES

If the sixty-two normal schools and teachers colleges whose catalogs are included in this investigation are representative, some work in geography is practically universal in the curricula of these institutions. Courses offered by the normal schools and teachers colleges whose catalogs were studied vary in number from one to eighteen, with the four-year teachers colleges generally offering a wider selection of courses than the two-year normal schools. Geography is thus far more generally a part of the curriculum of the teacher-training school than of the liberal arts college.

In the colleges and universities, courses in geography are generally confined to geographic content, whereas in normal schools content is frequently combined with methods of teaching geography. Such a combination of subject matter and teaching meth-

ods is occasionally found, however, in departments of education in liberal arts colleges. In the four-year teacher training courses this tendency to combine content and method is somewhat less apparent than in the shorter courses.

EFFECT OF ENROLLMENT AND YEAR DIVISION UPON COURSES

In general catalogs of the larger institutions announce more courses than do catalogs of the smaller schools. Altho the correlation between the enrollment of institutions and their geography course offerings is positive, there are outstanding exceptions to this generally manifested tendency, and frequently institutions of approximately the same size differ widely in the work they provide in geography.

With normal schools and teachers colleges it seems possible that the way in which the academic year is divided may perhaps influence slightly the number of geography courses offered. Two-thirds of the sixty-two normal schools and teachers colleges included in this study divide the academic year into quarters rather than semesters. Obviously this division makes possible more courses, but since the twenty teacher-training institutions which divide the year into semesters give as many courses in geography in proportion to their enrollment as do those which divide the year into quarters, probably but little significance should be attached to the influence of year division upon course offerings.

Seventy per cent of the colleges and universities included in this investigation divide the academic year into semesters rather than quarters. Since variations between similar-sized institutions administered upon the semester basis are as great as between those administered upon the semester plan and the quarter plan, probably little if any importance should be attached to the effect of year division upon the number of courses offered.

GEOGRAPHY IN COEDUCATIONAL, IN MEN'S, AND IN WOMEN'S COLLEGES

Of the 322 senior liberal arts colleges and universities included in this catalog study, 242 or 75 per cent are coeducational. These coeducational colleges range in enrollment from 49 to 13,392 and have a median enrollment of 535 as compared with the median 494 for the entire group of 398 higher institutions included in the survey. Coeducational colleges which offer no work in geography are comparatively smaller than those which do offer such work, their

enrollment ranging from 68 to 1,147 with a median of 302. This coeducational group includes the largest institutions of the entire study and also those which offer the most work in geography. Thus it seems probable that the small size of the colleges may have more to do with the absence of any geography courses than has any coeducational feature.

Thirty-one colleges, or slightly over 9 per cent of the 322 senior liberal arts colleges and universities whose catalogs were studied, admit only men students. Students in these colleges range in numbers from 144 to 2,594 with a median number of 495. Some geographical work is offered by twenty-seven of these colleges or 87 per cent of them. The four institutions which do not offer such work are small colleges with from 172 and 457 students.

Forty-nine of the senior colleges in this survey, over 15 per cent, admit women students only. Their enrollment range is from 59 to 2,137 with a median size of 415. Twenty six, or 54 per cent, of these colleges give no work in geography. Women's colleges offering no work in geography range in size from 59 to 1,809 with a median size of 301. Here again it is obvious that the larger colleges tend to provide for more instruction in geography than do the smaller ones. A few colleges for women offer commercial geography as a part of secretarial training, a phase of business training not emphasized by any of the men's colleges whose catalogs were studied.

There is discernible a quite apparent tendency for proportionately fewer colleges for women to provide work in geography than is the case with coeducational and men's colleges. It is quite probable, however, that this study does not include enough colleges exclusively for men or for women to justify attempting to identify and interpret such trends. It should be noted, moreover, that several colleges for women are exceptional in offering more work in geography than is given by any college for men included in this investigation.

Of the sixty-two normal schools and teachers colleges whose catalogs were read, 95 per cent are coeducational altho the vast majority of their students are women. Since courses of study of the 5 per cent which admit no men are practically like those of the 95 per cent which admit both men and women, no peculiarities of curricula can be attributed to the absence of men students. The general inclusion of geography in normal school curricula seems

due rather to the desirability of teachers having some knowledge of geography and methods of teaching it than to any conditions of coeducation.

GEOGRAPHY IN JUNIOR COLLEGES

This survey includes only fourteen junior colleges and any attempt to draw definite conclusions regarding geography trends from such a small number of institutions would be unwarranted These junior colleges range in enrollment from 68 to 629 and have a median size of 120. Six are coeducational and eight are women's colleges. Only one is of the publicly supported and locally administered type of junior college now so rapidly developing. Five of the coeducational schools represented provide some work in geography. None of the eight junior colleges for women whose catalogs were studied offer geography.

CURRICULUM DIFFERENCES DUE TO GEOGRAPHICAL LOCATION

The only observable difference in geography courses offered by institutions located in different parts of the country is in local geography. Thus many colleges and normal schools stress the geography of the home state or region. Twenty-five different course titles suggest subject matter primarily of local interest and importance. This emphasis upon local geography is particularly noticeable in teacher-training courses.

CONCLUSIONS

Geography in one or more of its various phases is a generally accepted subject in the majority of educational institutions above the high school, altho there is great variety in the place and importance accorded it. This lack of uniformity is probably partially due to the comparative newness of geography as a college subject and may not be altogether undesirable since the abundance of geographic material and the breadth of the subject permit it to contribute to various branches of study. Yet it seems evident that geography's place might be more clearly defined and that study is needed to determine what curriculum placement will yield best results.

Geography courses tend to be concentrated in the geography department in institutions maintaining such a department. Where there is no department of geography, there seems to be a tendency

for general geography courses to be allocated to the department of geology and for applied courses to be given in the department of economics or commerce.

The majority of geography courses seems to fall under some aspect of physiography, the teaching of geography, or the application of geography to human life and its activities. Altho many courses are organized around physiographic content, there is a pronounced tendency to give the subject its application and social significance as evidenced by the wide variety of courses in economic, in historical and political, and in human geography.

Altho there is a tendency for larger institutions to offer more work in geography than is provided by smaller ones, there are probably other factors as potent as mere size in influencing kinds and numbers of geography courses offered. Doubtless tradition, equipment, and faculty attitude toward and preparation in geography are important influences determining geography course offerings.

In spite of notable exceptions, there seems to be a general tendency for coeducational colleges to offer more work in geography than is provided by men's or women's colleges, and for men's colleges to provide more than women's colleges. However, it is probable that other factors than the sex of the students are responsible for the kind and variety of geographic work offered.

Such a wealth of material may be assembled under the caption of geography that there may be danger of too great overlapping of geography courses with work in other fields. The distinctive function of geography is to describe and explain the relations between man and his physical environment. Since an appreciation of this relationship is frequently basic to an understanding of other subjects, these other subjects may easily project themselves into the realm of geography. For students of geography, this may result in a wasteful overlapping of subject matter. This situation might be clarified by a thoughtful and careful evaluation of the contents of courses of study in geography and in related fields.

INDUSTRIALIZED GEOGRAPHY

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THE PROBLEM

Ours is an age of organized industry. It is characterized in part by the growth of great cities. Perhaps one-fourth of the population of our country is now gathered in cities of one hundred thousand or more. Because of this fact, it is claimed by many of those who have undertaken to reconstruct the curriculum to meet the demands of modern conditions, that a large proportion of the children are partly or wholly removed as a result of this concentration of the population under artificial conditions, from contact with the natural environment. They say that the dependence of human beings upon their natural environment, once paramount in the case of most of them is so obscured in our complexly organized society, that the appeal to nature now falls upon unresponsive ears.

But as a matter of fact is not such a view very far from representing the actual truth? Is it not advanced in support of certain theoretical opinions as to methods of instruction appropriate to a mechanically functioning industrial society? In such a society the individual has lost a great part of his freedom and initiative and that direct dependence on Nature which is the condition of life in a more natural and simple existence such as his ancestors led.

Are we going to allow the fact that the field of activities of many, especially in the larger cities, has been narrowed by the organized specialization of the present day to be so stamped on the minds of growing children that they shall come to think of themselves only as members of a social group in which, with some exceptions, their work and duties are so circumscribed that they must function merely as parts of a great impersonal machine?

INFLUENCE OF AN INDUSTRIAL SOCIETY

In the old life children, as they grew up, developed self reliance. All their powers were called into play in order to overcome the adverse conditions and make the most of the favorable factors of the environment. Their individual lives depended upon their ability to turn to their advantage the forces of Nature. A steady hand, a keen eye, reason and judgment were called for.

Now that many children do not grow up in daily contact with Nature as children once did, it is all the more important that we should build up in their minds thru their unorganized and fragmental experiences the best possible substitute for this. It is only thru a geographical interpretation of life that this can be obtained. If this basic ideal of real geography is wholly given up and we substitute for it a socialized and industrialized geography, the aim of which is to understand the part which men play in the social organism, the child's outlook will be irreparably limited. There is no questioning the fact that in a highly organized society, man tends to become an automaton. He learns to be one, or at most, a few things well, while the greater part of the powers with which Nature has endowed him, become atrophied. A properly organized educational system should aim with every means at its disposal to make up for the lack imposed upon dwellers in large communities by emphasizing all possible contacts with the natural environment. Should we not continue to hold up to their view the advantages of the simple life which tend toward the development of the best all-around man? Is it not possible that a future society will get at least partly back to Nature?

We now see a tendency in almost all courses of study to organize geography about industrialized and socialized aims. There is grave danger that its true nature will be lost sight of. An industrial aim is altogether a different matter from a geographical aim. Its outlook is narrow and utilitarian instead of cultural. It practically loses the contact with nature.

OPPORTUNITIES OF CITY CHILDREN

A real understanding of geographical relations, such as can be made useful, must be based upon experience. Are the actual and possible experiences of city children so circumscribed that they cannot be made the basis of real geography?

Let us see what some of these are. There was a time when means of transportation were so poor that many of the children in the larger cities saw little of the country. However, at that time there were comparatively few of such children, because the cities were so much smaller that they are now. Methods of instruction were poorer. In fact children rarely studied their environment but learned facts out of a book.

Now the automobile is almost universally used by all classes of society so that most city children get into the country as they never did before. The improvement of suburban travel enables

many to make their homes in the country who were formerly cooped up in the city. The Boy Scouts and Camp Fire girls organizations take many children into the country. Many go into the country in the summer to work. Besides all these influences there are museums in every large city where are found realistic exhibits illustrating the lives of primitive peoples—their homes, dress, and handicrafts, all developed in response to the environment. There is also an increased use of photographs, illustrated magazines and moving pictures. The travelogs and representative scenes of real life in remote parts of the earth, were closed doors to all children, both city and country, only a few years back. In the city of Los Angeles which has now a population of about 1,400,000 there are relatively few children who are not more or less familiar with country life and the resorts of mountain and sea-shore. Thus the children, in spite of their concentration in cities, can get in touch with Nature much more fully than one would at first think possible.

VALUE OF REGIONAL GEOGRAPHY

School geography is based upon the discoverable relationship between living things and their natural environment. Elementary geography when most efficiently organized is regional. By this is meant that it considers all the important earth-conditioned facts and phenomena of a given area as they affect living things, particularly man. When *relationship* is left out the facts never acquire any geographic significance. They remain mere information. A regional study is then rounded, and symmetrical and of concrete value.

When we ignore the regional approach and attempt to teach elementary geography from the topical or industrial point of view, the symmetry and completeness of the problem is lost, and the work necessarily assumes a partial and one-sided character. We introduce only such material as will elucidate our topic. There may be other factors influencing the people of the region that are just as important, and which should be taken up if we wish to get an intelligent idea of the lives of the inhabitants, but these must be ignored under the topical plan.

The topical plan is the worst possible for the pupils of the fifth, sixth and seventh grades who have not previously taken up an intensive study of the region concerned. For advanced pupils who have been thoroly grounded in regional geography and who

wish to undertake a specialized problem, such for example as the conditions governing successful cotton growing over the earth, or the possible regions of rubber production, the topical method is well suited. The geographic study of such topics as coal, iron and petroleum, which are so important in modern life, cannot be taken up to advantage since their location and character are not determined by geographic conditions. We may have coal in the tropics or the arctic regions, among the mountains or in the plains, in a wet or a dry climate. The chief geographic relation associated with them is accessibility and convenience to market.

NATURE AND CONTENT OF REAL GEOGRAPHY

The content of real geography does not consist of a body of facts which are always and under all circumstances geography. There is no such thing as a fact which is inherently geographic according to the modern interpretation of the subject. Whether a given fact has geographic significance depends upon how we look at it. The statement that the largest city of the north central United States is situated at the southern end of Lake Michigan is a matter of mere information. But if we say that because of certain favorable physical conditions the largest city of the central United States has grown up at the southern end of Lake Michigan we have made it geographic. That is, a fact looked at from the point of view of its determining factors becomes something more than mere information. It takes on a high meaning and has a richer value for us.

THE FETISH OF INDUSTRIALISM

The fetish of industrialism has taken possession of school geography in many of our larger centers of population. Beginning with the fifth grade and continuing as long as geography is taught the work is centered about industrial themes. In one city school system, which the author has in mind, the so-called geography is almost wholly devoted to the study of industrial *processes.*

How the *processes* of coal mining, iron manufacture, cotton manufacture, flour milling and even bread making can be considered aspects of the subject of geography is beyond the writer's comprehension. If they are taken up because they are remotely related to geography, then it is legitimate to include almost everything under that subject. Is there any other subject in the whole

curriculum that is so abused in this respect? How can we expect real geography to maintain a place in the schools under such treatment?

INDUSTRIAL TOPICS

We have no right to consider the topic, "An Industrial Nation," taken up in one of the recent social science courses, as a substitute for geography. It is a study in *industry* and nothing more. It may include among others so-called geographic facts, but these are used for the purpose of developing the industrial theme and not to give geographic insight. It gives no training in geographic interpretation, the essential thing in all usable geographic knowledge. You may say that it does not matter what the topic is called, and that gaining an insight into the life of the nation is what we are after, and that this study is most conveniently attached to geography. Such a point of view is one of the factors tending to discredit geography as a school subject at the present time.

An industrial nation does not necessarily arise because its territory contains deposits of coal and iron. China is a good example of a country well supplied with these things, which is, nevertheless, largely agricultural and must always remain so. Japan, on the contrary, has little coal and iron, but is rapidly becoming industrialized. There are people occupying the richest and most favored lands who are making little use of their coal and iron. Unless an industrial life is forced upon them from the outside, the inherent character of such a people in combination with the influence of their physical environment will shape their development along other lines than that of industry.

The study of an agricultural people in relation to their environment may be just as important for intelligent citizenship as the study of an industrial nation. In fact the first is far more important for students of real geography because it gives an insight into life conditions, but the latter seems to be the popular thing at present.

An industrial aim which is assumed to teach also geographic insight must of necessity be a failure as far as the geography is concerned. The latter must be superficial, and unless the pupils have had adequate previous training in the interpretation of relations, must be largely the memorizing of facts. The time and opportunity for the study of causal relationships is lacking.

CONCLUSION

Geography cannot be socialized, topicalized or industrialized without in large part destroying its inherent viewpoint and consequent value.

If we socialize geography we make man's relation to society instead of to Nature the aim, which is wholly wrong. The subject becomes lost entirely.

If we topicalize geography we choose one feature of an environment and work it out in detail, thereby introducing much material that is not geographic, and leaving out much that is fully as important and perhaps more so.

If we industrialize geography we are obliged, in order to work out our aim, to use many so-called geographic facts and conditions without understanding their significance. This method fits in well with the old memoriter geography in which little attempt was made to explain facts, but should have no part in the new or real geography.

FOOD PRODUCTS ORIGINATING IN LATIN AMERICAN COUNTRIES AND THEIR IMPORTANCE IN THE WORLD MARKET*

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We are accustomed to trace back to Western Asia and Central Europe a large proportion of the staple food products in use today, forgetting sometimes the debt which we owe to the Western Continent, and especially to the Latin-American countries. These foods are of two classes: first, those which were first used and made known to the world by Latin-American people; second, those products originating elsewhere but which later were grown in these countries, and dominated the world market.

In considering this situation it should not be forgotten that there is in the tropical zone three and one-half times as much arable land in the Eastern Hemisphere as in the Western, and the population of the Eastern Hemisphere in this zone is more than fourteen times as great, as that of the Western.

TUBERS

To the first class belongs that remarkable tuber, the potato, with its history of travel from South America to Spain and then

* Abstract of paper presented at Third Pan-American Congress, Lima, Peru.

back to Florida and Virginia, and to Ireland and other parts of Europe. As late as 1771 in England, the potato was regarded as food fit for stock only. Now it is much more important in Europe than in the United States. On account of their antiscorbutic properties, potatoes are invaluable for use in garrisons, at sea, or where the diet is necessarily monotonous, and green vegetables can not be obtained. The potato, however, does not grow well in some localities of the Latin-American countries, on account of the intense heat, so the natives discovered a long time ago a certain starchy root called the Manihot, or Cassava, and there as well as in many parts of Africa it has become the staple wheat substitute. Arrow Root, originating in the West Indies and parts of South America, to a more limited extent also takes the place of cereals.

The Sweet Potato, which originated in South or Central America, and its plebian relative, the Yam, are widely grown both north and south, and form a valuable food product.

FRUITS

One of the most unique of the Latin-American tropical foods is the Avocado or alligator pear. This fruit is spoken of as being found in Columbia as early as 1526, yet in all these years, it has not become well known in the countries north of the zone where it can be readily grown. This is probably due to the fact that we do not yet know how to transport it in good condition to these foreign markets, so no great demand has arisen for it. The Avocado is in reality a "salad fruit" and in the tropics, it is said an avocado, four or five tortillas and a cup of coffee constitutes a "square meal" for anybody. On account of its composition it is admirably adapted to serve as food for the laboring man.

It is asserted on good authority that some types of bananas grew wild in parts of South America before the advent of the Spanish Explorers, but there seems to be a general understanding that bananas were introduced into South America by the earliest of the travelers from Africa and Asia. They certainly found favorable soil and climate, as is shown by the fact that it is only one hundred and twenty-five years since a small shipment was brought from Cuba to New York by a coasting vessel, and today the United States alone imports more than 43 million bunches of bananas annually. The hot, moist climate of the tropics like that 25° north to 25° south of the Equator, where the rainfall is 100 inches, is best adapted to their growth. This tremendous increase

in the use of bananas is due especially to the fact that this fruit may be picked quite a while before it is sufficiently ripe to be edible, and also to the wonderful improvement that has been made in methods of rapid transportation from plantations to the northern market. People have also learned that the banana is a real, nutritious food rather than a fruit that may be used as a dessert or a luxury; in fact, it contains more calories of energy than does the potato.

BEVERAGES

The Maguey plant, a species of cactus, has proven of much commercial importance, especially in Mexico, as a source of a sweet juice which when allowed to ferment becomes the "pulque" or when distilled the "mescal," the national alcoholic beverage.

The people of the United States are today looking to the Latin-American countries for their supply of two of the three universally used non-intoxicating beverages—coffee and chocolate. So much was chocolate prized that the great Swedish botanist, Linnaues, called the cacao the "fruit of the gods," "Thea Broma." Long before the Spanish galleons started on their voyages of discovery the Aztecs, or other early natives of Mexico, had learned the art of using the cacao bean in making "chocolate" for their "afternoon teas." In 1529 the cacao products were first brought to Spain, and their use has spread thru the entire civilized world. If you find a valley covered with large trees, which will protect the cacao trees from winds, where the mean annual temperature is 80°, where the soil is rich, and there is plenty of rain, there you should be able to raise cacao. The natives have developed great skill in curing the "beans," by roasting under the right conditions to bring out the delicious flavor, before they are put on the market. Thus an Indian beverage which was made in a small way by these natives, has become the food of the masses all over the world today, and nearly a billion pounds of cacao beans are annually raised, of which the United States uses two-fifths.

Maté, or Paraguay tea, interests the South Americans very much, but altho persistent efforts have been made to extend its use into other countries, it has never taken the place of the so-called "China Tea." The shrub from which the tea leaves are obtained grows wild in many parts of South America, and the leaves make a beverage that has sufficient stimulating qualities so that it has become almost a daily necessity to 15,000,000 people.

In passing, another product of these regions should be mentioned, viz., the Guarana, which is made from the roasted and ground seeds, and is used by the working people, especially in Brazil, to ward off hunger and stimulate the tired nerves.

Another important stimulant, namely coffee, is without doubt of African, probably Abyssinian origin, but was very early introduced into Arabia and soon became an important crop in Java and India. It was first taken to Martinique in 1717 and from there, was introduced into Brazil and other southern countries. Today, Brazil is by far the greatest coffee producing country in the world. Of the 16,000,000 bags of 120 pounds each grown annually in the world, Brazil frequently furnishes 10,000,000 bags. Colombia and the Central American states stand next in rank as producers.

Flavors

If we leave the field of the more nourishing foods and investigate the flavors that man has found so agreeable, what substance of this class have we found more satisfactory than Vanilla. This is the fruit of an orchid which grows as a vine attached to the rough bark of the trees of the tropical forests. The flowers must be fertilized by hand by placing the pollen of the male flower on the female flower by the use of a small splinter. In the silky pods which are filled with numerous small black seeds is found the delicious flavor called vanilla. This was first known to the Aztecs of Mexico and Central America. It is now cultivated in Porto Rico, Java, Mauritius, Tahiti, the Seychelle Islands and elsewhere in the Tropics. Closely allied in flavor to the Vanilla is the flavor of the Tonka Bean, which was first found in Guiana. It is in great demand by perfumers, and sometimes is used in making a compound vanilla and tonka flavoring extract.

Summary

As many of the Latin-American states are to a great extent undeveloped, there still exist immense possibilities in the way of fruits, oil-bearing and edible nuts and vegetables that have never been investigated, and about which the world at large knows nothing. Only a few of the better known are here mentioned. The natives have utilized the White Sapote, with its sour-bitter flavor; the Chayote, which decorates a vine, in itself very ornamental for the lawn; the Brazilian Cherimoya, with its creamy flakes; the

fruit of the Jaboticaba tree; and the fruit of Pedjibaye Palm of Costa Rica, which as it contains forty per cent of carbohydrates is extremely nutritious. For concentrated nourishment, the South American turns to the Brazil nut, which was described as early as 1850 by Humbolt. The haitat of the immense trees which bear these nuts is especially in Brazil and Guiana.

Finally it will be noticed that the food products *originating* in the Latin-American countries include the potato, cassava, sweet potato, avocado, maguey, white sapote, chaoyte, cherimoya and several less known fruits, Brazil nuts, the vanilla, the tonka bean, and the stimulants cacao, maté and guarana, while in the second class noted above or those *originating elsewhere* are included the banana and coffee—all these taken together constitute an extremely important part of the food of the man.

SOME GEOGRAPHICAL INFLUENCES IN THE GROWTH OF FORT WAYNE

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HISTORICAL BACKGROUND

After defeating the Indians in the Battle of Fallen Timbers, Anthony Wayne advanced to the place where the St. Marys River meets the St. Joseph River to form the Maumee. Here, at a point overlooking the junction of these rivers, a fort was built which was named in his honor, Fort Wayne. This was the last of a series of forts which stood near the junction of the three rivers.

A glance at the map of North America will show the strategic importance of this fort. From the northeast flows the St. Joseph River. From the southeast flows the St. Marys River. The Maumee, made by the union of the St. Joseph and St. Marys, flows eastward into Lake Erie. By crossing a short portage southwestward, thru an abandoned valley, Little River is reached, the latter being a tributary of the Wabash River. This provided a waterway from the Gulf of Mexico to the Gulf of St. Lawrence, broken only by the eight mile portage between Fort Wayne and the head of Little River.

Of course we would expect to find people settling near a fort and especially one so favorably located as Fort Wayne. True to

our expectation, we find a small village and trading post in existence as early as 1719. However, one hundred years later when Captain Riley visited the fort, he described the village as having less than thirty houses around the fort. In 1822, a post office and land office were established and two years later the original plat of the city was laid out. From that time (1824) on, Fort Wayne has been a town and its growth and development can very largely be explained by its transportation facilities.

PHYSICAL GEOGRAPHY OF THE REGION

Since the rivers were the main routes of travel in early times and hence, the chief factor in the location of Fort Wayne, let us consider the origin of these rivers. The topographical features of this region are largely glacial, having been subjected to the influence of the Illinoian and Wisconsin Glaciers. The edge of the Illinoian Glacier advanced far to the south of Fort Wayne and likely gave rise to the White River in southern Indiana. Just what effect it had upon the area in question is largely a matter of conjecture, because the Wisconsin Glacier came along and covered the tracks of the earlier ice sheet.

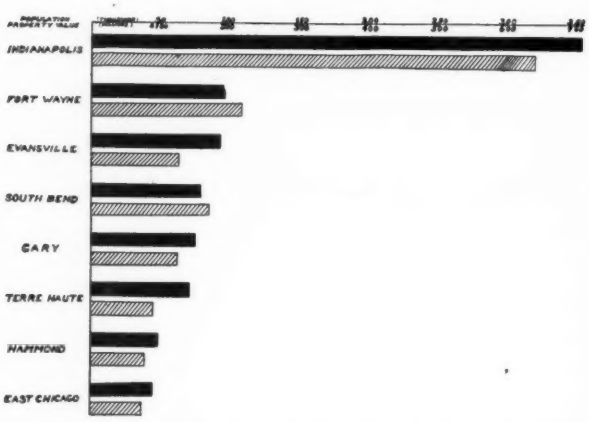

FIG. 1. Graf showing the relation between the population and the value of property in eight of the largest cities in Indiana. The solid black bar shows the population and the lined bar represents the value of the taxable property. Data from Financial Statistics of Cities, U.S. Department of Commerce, 1925.

As the edge of the Wisconsin Glacier receded, we find a lobe projecting persistently into northeastern Indiana. The melting ice gave rise to the St. Joseph and St. Marys Rivers which in turn flowed into the Wabash River. Since the edge of the ice was more or less stationary for some time, a moraine of considerable size was formed. With the receding of the edge of the ice towards the northeast, Glacial Lake Maumee was formed which also was drained by the Wabash. The old lake shores can be quite

definitely traced from the converging point—near New Haven, Indiana—in a northeast and southeast direction.[1]

ORIGIN OF THE MAUMEE RIVER

When the edge of the ice had receded past the Mohawk Valley—which is only a few feet lower than the abandoned Wabash Valley at Fort Wayne—the lake began to drain gradually to the east. Then a very interesting thing happened in the history of the rivers. Because of the lower outlet in the east, the St. Joseph and St. Marys deserted the Wabash River and flowed in a northeasterly direction into Lake Erie, making an angle of almost 130 degrees. With the removal of this supply of water, the northern part of the Wabash River became extinct leaving only the well defined valley for a distance of eight miles without a stream. Then begins Little River which is well characterized by its name. It was thru this valley that the Wabash-Erie Canal was built—1830-40.

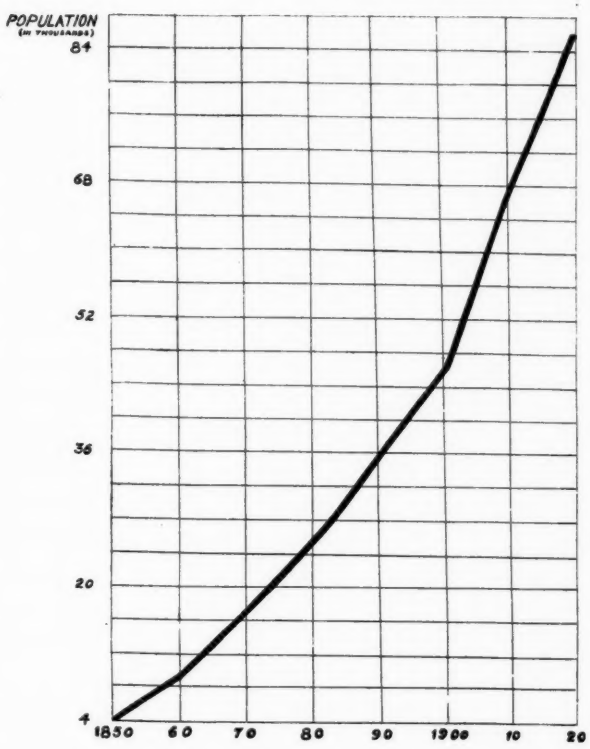

FIG. 2. Chart showing the growth of Fort Wayne. It may be noticed that following 1900, the increase in population has been most rapid. This is due largely to the fact that the industries established earlier began producing on a large scale about this time. Of course, new industries also had their effect.

GROWTH AS A TRADING CENTER

The Indians early recognized the importance of the fort as a trading post. According to memorandums and letters from army

[1] Charles R. Dryer. Geology of Allen County, 16th Annual Report of the State Geologist of Indiana. Wm. Burford, Indianapolis. 1889.

officers, the language around the fort was very much confused because of the great number of Indian tribes that gathered near by. One officer in speaking of this subject says he—"imagined himself in a real Babel."[2] Other reports say, "Canoes lined the banks and after the hunting season the Indians would bring in great loads of peltries."[3] The early traders recognized the weakness of the Indian in his desire for jewelry and, as a result, one of the earliest factories to be established was a jewelry factory. Of course the jewelry was crude and cheap, but the Indian trade was very well taken care of.

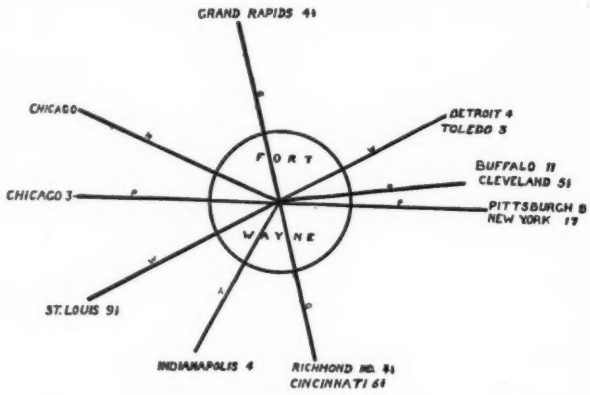

FIG. 3. Chart showing rail connections to large cities and the time involved in reaching them from Fort Wayne. P—Pennsylvania Railroad; H—Nickle Plate (New York Central); W—Wabash; G—Grand Rapids and Indiana; T—Indiana Service Corporation and Union Traction Company of Indiana. The number following the name indicates the hours required to reach the city.

Self preservation is the first law of nature and so naturally the people began at an early date to produce food and food stuffs. Flour mills were the most common type of factory during the early period of the city's growth. In 1827, one mill boasted of having a capacity of eighty barrels of flour per day.

With the building of the Wabash-Erie Canal—which was started at Fort Wayne in 1832—the city began to take on a prosperous aspect and became the center of trade in northeastern Indiana. Then came the railroads. The first to be built to Fort Wayne was the Ohio and Indiana Railroad. This line operated trains between Fort Wayne and Crestline, Ohio and was opened in 1854. Within the next two decades, seven railroads centered here. It is interesting to notice that during this twenty years the population of the city more than quadrupled itself. Then came the period

[2] Col. Robert S. Robertson. History of the Maumee River Basin, Allen County Indiana. Vol. 2, p. 67. Bowen and Slocum, Indianapolis. 1905.

[3] *Ibid.*

of consolidation, and at the present time, three steam and one electric railway companies control the lines operating thru our city. Fig. 3 shows the time involved in reaching some of the larger cities.

THE MODERN INDUSTRIAL DEVELOPMENT

Up until 1850, the chief industries of Fort Wayne were the flour mills, jewelry factory, tanneries, and the production of raw silk. It was in 1853 that the pioneer of the present large industries appeared—the Bass Foundry, famous for its car wheels and heavy railroad castings. Along with the advent of the foundry, we find such industries as carriage and harness making beginning to appear. However, it was during the decade from 1880 to 1890 that the city became a manufacturing center. During this period, at least eight of Fort Wayne's present leading industries found their way into the city.

Since 1890, the industrial importance of the city has continually increased until there are 300 industries employing 24,824 people at the present time. It would be entirely beyond the scope of this article to attempt a discussion of each industry or even to list all of the products made here. Suffice it to say that there are fifty entirely different products manufactured, including such things as motor trucks, electrical equipment, gasoline and oil pumps, hosiery, hats, paint, gas manufacturing equipment, dredges, car wheels, and many others of equal importance. It is interesting to notice that the manufactured products in 1927 were valued at $120,943,193 (*Estimated*). These products are sold all over the world, both on land and on the sea. The annual payroll for 1927 was estimated at $23,526,508. The relative prosperity of the city may be judged from the accompanying graf.

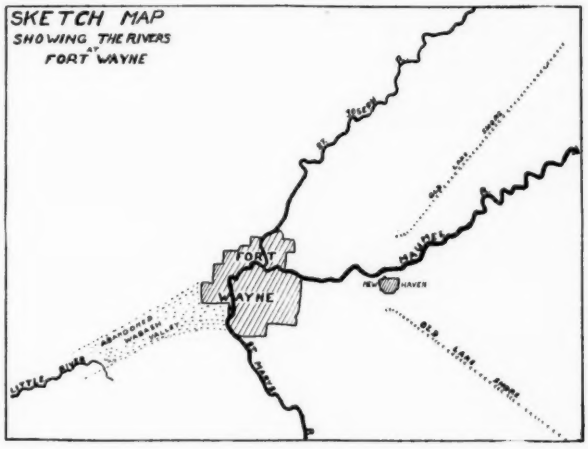

FIG. 4

ADVANTAGE OF A GRADUAL GROWTH

The increase in population being gradual, the city has been able to meet adequately the arising problems. To provide recreation after working hours, the city has set aside twenty-nine parks thruout the city, covering an area of 639 acres and valued at $1,360,000. Within easy reach of the city are numerous lakes where a delightful week-end may be spent. The educational and religious opportunities are among the best in the state.

Fort Wayne is an American city, having over 90 per cent of its population white, American born. It is also a city of homes since over 82 per cent of the city's population are home owners.

CONCLUSION

In summing up this article, we may say there have been three stages in the development of Fort Wayne, the first stage being the river stage when trading was carried on chiefly thru the rivers (1719-1834). The second may be called the canal stage during which Fort Wayne became the chief market in northeastern Indiana (1834-1858). The third stage may be called the railroad stage during which period manufacturing became predominate in industries. What future means of transportation will influence its growth? Being a manufacturer of staple products, the indications are that Fort Wayne should continue to grow in the same steady manner it has in the past.

A TRIP TO THE PHILIPPINE ISLANDS

RENA A. BOUSH
White Street School, Springfield, Massachusetts

THE MOTIVATION

In this particular case it was rather easy to lead the children to want to take the trip to the Philippine Islands. The teacher had lived there when she was a child—the children wanted to go and the teacher was willing to return with them. "Why can't we make believe we are going and have the teacher go with us." That was the beginning of the project.

A project has been defined as a unit of whole-hearted purposeful activity. The interest displayed by the children in the schoolroom as well as at home indicated without a doubt that they had entered into the work whole-heartedly. The extra-curricular activities motivated as well as correlated all the work in such a way as to make every undertaking purposeful.

A child, like many grown people, is anxious to reach his destination whether he is really traveling or whether the trip is just imaginary. Unless he has a definite purpose to stop enroute he is not particularly anxious to have any delay. A class book illustrating the trip from start to finish served a three-fold purpose aside from creating in the child a desire to stop at the important cities and learn more about each place.

1. Motivated language work. (Each child was anxious to have his story in the book)
2. Motivated drawing and handiwork
3. Summarized geographical knowledge gained

THE OUTLINE OF THE PROJECT

The project, which lasted from February to June, might be outlined as follows:

Trip from Springfield, Massachusetts, to Manila, Philippine Islands.

A. Book illustrating the trip. (Stories and pictures)
B. Club
    1. Handled business matters of trip
    2. Published newspaper
    3. Reported on places visited

C. Newspaper. (Daily happenings in classroom)
D. Sandtables
   1. Harbor—San Francisco
   2. Filipino Village

In organizing the club parliamentary procedure was introduced and used throughout the club meetings. The children elected their president and secretary and decided upon a title for the club. Children who had been reading reference books presented the material at the meetings. The club work and the class book were closely related. The child soon realized that he must talk well before he could write well.

At one of the club meetings a child suggested that we have a club paper. The motion was carried and immediately a committee was appointed to work out plans for a club newspaper. The paper was published once a week, and contained classroom news for the week.

We tried to make everything we did during the day relate to our trip, and in this way the children seemed to be living the project. The following outline shows the close correlation of subjects.

ACCOMPLISHMENTS

I. *Arithmetic*

Fare from Springfield to San Francisco

Upper berth to Chicago	$ 7.10	Lower berth to Chicago	$ 9.00
Fare	33.19	Fare	33.19
	$40.29		42.19

Subtract the two to find the difference in upper and lower berth
Figure the same from Chicago to San Francisco
Multiply to find the cost of tickets for several

II. *Reading*

Stories—Children of Other Lands
Geographies
Histories

III. *Spelling*

Words that children used in writing their stories

Getting Ready		*Chicago—first stop*	
trunks	clothes	hotel	stockyards
suitcases	train	parks	city
packing	station	cattle	ranches

IV. *Music*

A. Rote Songs
B. Lessons in appreciation
   When we left Honolulu I had the children put the Hawaiian leis around their necks and I played Hawaiian records

C. Songs that were not related in any way to the project were practiced in order that we might entertain the children of Honolulu and the Philippines when we reached there

V. *Language*
- A. Letter writing
  1. To Filipino children telling them about our city and asking questions about their country
  2. To the principal of our school, who lived in Chicago at one time, telling her what we learned about the city
  3. To friends telling about the trip
  4. To a Filipino woman from whom we borrowed a native costume
  5. To a friend from whom we borrowed slides of the Philippine Islands
  6. To a friend from whom we borrowed Filipino hats and mats
  7. To parents inviting them to a club meeting
- B. Stories for book and stories for newspaper
- C. Oral language and club work
- D. Minutes of the club meetings
- E. Poetry
  1. Children learned poems
  2. Children composed short poems

VI. *Geography*
- A. Oceans—Atlantic and Pacific
- B. Route—Springfield to San Francisco traced on map
- C. Chicago
  1. Location
  2. Stockyards, railroads, manufacturing city, parks
- D. Omaha
  1. One of largest railroad centers in world
  2. Other information furnished by children
- E. Rocky Mountains
  1. Location
  2. What is a mountain?
  3. Difference in temperature and air
- F. Oakland and San Francisco
  1. Means of crossing bay
  2. What is a bay? Harbor?
  3. Interesting facts about the city of San Francisco

  Table representing harbor with our ship leaving
- G. Honolulu

  Climate and customs of the people
- H. Story of losing and gaining a day on the ocean (but not the reason)

VII. *History*
- A. Early settlers in the East move westward
- B. Gold in California
- C. Honolulu—Owned by United States. How Gained?
- D. Philippine Islands

  Discovered by whom? Named by whom?

  Story of Admiral Dewey

  What are we doing for the Filipinos?

  Their future

VIII. *Nature Study*

A. Plants and Fruits

Bamboo, nipa, rice, pineapple, coconuts, bananas

Children brought a large coconut in the shell to school. We all tasted the meat

B. Animals and insects

Monkeys, carabaos, lizards, grasshoppers, lightning bugs

IX. *Art and Handwork*

A. Book

Free hand drawing pictures illustrating the stories

The pictures told stories about: Chicago; Omaha City; Great Salt Lake; Rocky Mountains; San Francisco; Honolulu; activities on board ship; Manila

B. Sand-table: San Francisco Harbor

1. Sky line drawn on board
2. Table covered with crêpe paper to represent water
3. Built wharf out of a box and connected the picture on the board with table
4. Large toy steamer on the table
5. Soil to represent the Golden Gate

C. Honolulu

1. Leis of orange crêpe paper. When we left Honolulu we put the leis around our necks and played Hawaiian records
2. Picture taken of class leaving Honolulu

D. Filipino Village

1. This replaced the San Francisco Harbor
   Construction work with cardboard and plasticine
2. House made out of a box. Dried grass sewed on roof for nipa
3. Trees made of construction paper and animals made of plasticine

X. *Gymnastics*

A. Games played on board ship

B. Games of Filipino girls and boys

XI. *Extra Activities*

A. Lantern slides

B. Study of Philippine money

C. Display of native costume

At the end of the term a special club meeting was held to which all the parents were invited. The children retold stories of the trip and displayed their book, the newspaper, and the Filipino village, with enthusiasm.

AN INTEREST-STIMULATING DEVICE

In junior high school geography classes where the pupils are grouped homogeneously, one finds it as much of a task to keep the scope just wide and deep enough for the advanced sections as it is to create the right incentive for the slower classes to master minimum essentials. I have tried the following scheme in my star section with very good results.

While studying over the general facts of Asia, the class voted to spend most of the time making a closer study of life and industries in China, India, and Japan. As one phase of the development I assigned the task of making a good-sized outline map of each of the countries as we came to it. Since we do not use formal note books, this was to be done in the composition books which we use to keep extra notes on each country. No pupil is entitled to place any name on the map until he has made a report to the class on something of interest about that place outside of the material in the textbook. If the class decides that he is entitled to use that name, he may then print it on his map.

I find that reports are ready to be given long before we are really ready for them and that such names as "Yellow River," "Mt. Everest," "Calcutta," are put down with much more thought and real interest. Similar reports will be given, but it is not difficult to judge whether or not the work is original. If the class meets every day, two days a week could be devoted to this project, but since ours only meets three days much of the work is done outside of class. The maps can either be traced or used as a lesson in drawing. Grading should be done carefully as this is a fair index to the pupil's interest in people and places and ability to do individual work.

In a slower section much more interest was shown in an essay on either "Rubber," or "Coffee" after I suggested marginal drawings of some of the processes. In fact, I discovered some talent in what seemed to be an unoccupied mind.

REBECCA A. CAREY
Anaconda, Montana

Send your devices to the Editor. We will be pleased to publish more plans that have been found to be helpful.

EDITORIAL NOTES AND NEWS

Brazil hopes eventually to supply the United States with nickel matte equal in quality to that received from Canada, and lower in cost. At present only one mine, located at Livramenta, Minas G, is being operated. The surface ore is nickel oxide, with an average nickel of 10½ per cent. The principal nickel mines of the world are now located at Sudbury, Canada, and in New Zealand.

The United States Geological Survey has just issued a map showing the agricultural classification of public lands in western Kansas and southwestern Nebraska. The map indicates areas of first, second, and third grade dry-farming; rough and physically tillable grazing land; sand hills; and irrigated lands. A text accompanying the map contains a description of the physical features of the land, and the methods and practices used in its development. The work is a part of our national conservation program. The cost of the map is 50 cents.

Another new publication of the Survey is a geologic map of New Mexico, printed in 17 colors. The map is in two sections which when joined measures 52 by 60 inches. The scale is 8 miles to the inch. The cost is $1.50. Both maps may be secured from the U. S. Geological Survey, Washington, D.C.

Are you familiar with the publications of the Natural Resources Intelligence Service, Department of the Interior, Ottawa? Many of these publications are free to teachers. One of these that recently came to the editor's desk is an "Animated Atlas" of the Dominion, 1928. It contains a full page map (about 10 by 14 inches) of each Province, with a page of descriptive material opposite each map. Each map tells, by means of pictorial symbols, the distinctive natural resources of the Province it represents. The recreational resources are spiced with humor.

Another publication of interest to both geography and history teachers is a map of the Dominion, entitled "Routes of Explorers." The scale is 197.3 miles to the inch. The routes and dates of the explorers and the location of the principal forts erected in connection with the explorations are shown.

Hydroelectric continues, as in the past, to supply one-third of the total demand for electric current. This power now totals 13½ million horse power, 4½ million of which is under Federal jurisdiction. There is no indication that hydroelectric is losing ground in comparison with power production from fuel sources. Undoubtedly increased efficiencies attained in coal, oil and gas stations for generating electricity will be in the future at the expense of water power; but this will be at least partially offset by advantages derived from the interconnection of generating stations into large systems making possible the use of great quantities of secondary power. The Commission is optimistic regarding future developments, but is hampered in its studies and investigations by a lack of adequate personnel. It now has under preliminary consideration applications for licenses totaling 5½ million horse power and an additional 15 million horse power awaiting action. The delay in granting these licenses postpones the use of our natural resources. Taken from the Eighth Annual Report of the Federal Power Commission: 1928.

The Committee on Cultural Relations with Latin America will conduct a "Seminar in Mexico," in Mexico City, July 13 to August 3, 1929. The program will include lectures, round-table discussions, and trips to nearby cities and towns. Applications for membership of the Seminar should be sent to Hubert C. Herring, 307 East Seventeenth Street, New York City.

The Austro-American Institute of Education in Vienna announces the third Vienna Summer school to be held in the University of Vienna, July 17-August 13, 1929. Lectures will be given by professors of the University of Vienna. The school will be conducted on the American plan. Ample time will be afforded for recreation and entertainment. The school will also be prepared to assist American visitors while in the city.

A railway between Turin and Nice was opened in October, just 75 years after the original scheme was projected. About 100 tunnels had to be built. It is hoped that freight congestion between these points may be relieved and tourist traffic increased.

A new record in grain export was established this year in the Montreal harbor. More than 212 million bushels of grain were exported. Wheat accounted for 70 per cent of the total, barley 14 per cent, oats 7 per cent, and rye 6 per cent.

Maintaining winter air schedules in the northern countries is attended with many difficulties. Those between Germany and Sweden have been made very difficult due to the short daylight period, the exceedingly poor visibility due to fogs on the Baltic, and the unfavorable landing conditions on rain-sodden flying fields. Montreal and Toronto hope to alleviate the snow problem at the airports by packing the snow-drifts with heavy rollers, and marking the runways with square discs painted yellow and black. The latter will contain some device for melting the snow around them. The airmail planes used between Montreal, Albany and New York have been fitted with skiis and wheels. Each wheel protrudes about 6 inches from the ski bottom so that the planes can land on bare or snow-covered ground.

Several changes in the political divisions of China have been made by the Nationalist Party. By reducing the size of some of the former provinces, two new ones, Sikang and Ningsia, have been formed, thus making a total of 30 provinces. These changes in the names of provinces are noted: Chihli is changed to Hopei; Kokonor, to Tsinghai. The new political capital of China is Nanking. This change in capital necessitated a change in the name of the former capital city, because "Peking" meant northern capital. Hence, Peking becomes Peiping, the provincial capital of Hopei.

A report of the U. S. Geological Survey on the Marmath lignite field of southwestern North Dakota has recently been issued as Bulletin 775.

A visual schematic representation of the tidal currents in New York harbor is now available. This publication consists of a set of 12 charts showing the direction and velocity of the normal tidal current for each hour of the tide. It may be obtained from the U. S. Coast and Geodetic Survey, Washington, D.C., for 25 cents per set.

Floating whale oil refineries now accompany whaling expeditions. The largest of these oil factories will be attended by seven chasers which will do the actual whale fishing. It will be especially strengthened for navigation in the ice of Ross Sea.

An extension of the Spitalfields Market for fresh fruits and vegetables London, England, was opened this fall. The extension occupies about six acres and has shed accommodations for 500 vehicles at one time. Until recent years, Spitalfields has handled mostly home grown fruits and vegetables. However, imports from foreign countries and sections of the Empire are increasing, and distant lands are competing for the trade. Thus, Jaffa (Palestine) orange dealers specialized in Christmas boxes. Argentine grape exporters are seeking a reduction in freight rates. South Africa hopes within three years to be able to export annually 3 million boxes of citrus fruits to European markets. However, to make this possible American competition, as well as a possible Brazilian one, must be met. The horticultural department of the Transvaal University believes this is possible if the quality of the fruit and its grading and packing are improved.

Are you familiar with the *Geographic News Bulletin*, published weekly by the National Geographic Society, Washington, D.C.? It contains illustrated items of current interest centering in various parts of the world. One of recent significance deals with "Afghanistan and Its Top Hat War." The subscription rate for the thirty issues is only 25 cents per year.

Teachers of geography will find many items of interest in the various pamphlets issued by different sections of the Bureau of Foreign and Domestic Commerce. A recent one by the Transportation Division calls attention to the use of lake boats during the winter for grain storage. About twenty-five boats containing 2,250,000 bushels of grain are now wintering in Montreal's harbor.

Tons of lillies and other flowers are grown in the equable climate of the Scillies for the flower markets of London. The flowers go by boat to Penzance where they are sent by fast trains to London.

The Harmon Foundation each year makes an award to the "Author of an article of signal benefit in stimulating constructive opinion in social or industrial fields." This Christmas the award was made to J. Russell Smith. His prize winning article, "Plan or Perish," appeared in "*Survey Graphic*," July, 1927. The J. C. Winston Company reprinted this article together with the one on "Wealth from Mississippi Mud," in a 10-page pamphlet to which mention was recently made in these columns. A few of these pamphlets are still available free to educators.

The A. J. Nystrom and Company announce these four series of desk outline maps: The D and D D size desk outline maps of various political units; the International Trade desk maps; The Branom Problem-Project desk maps; and the Webster-Knowlton-Hazen History maps. The latter are reproductions, except for colors, of the wall series.

Students of historical geography may be interested in Docent Sten De Geer's (Stockholm) article on "The Subtropical Belt of Old Empires" in the last issue of "*Geographiska Annaler.*" According to this investigation most of the old empires, and especially their capitals and nuclear areas, are confined to a narrow east-west belt between latitudes 25° and 45°N. This article, along with the others in the "*Annaler,*" is in English.

The latest Bulletin of the Nebraska Chapter of the National Council of Geography Teachers, Vol. 3, No. 4, announces a series of meetings, May 2-4, at the University of Nebraska. These meetings are sponsored by the Academy of Sciences, the Associated Social Sciences, and the Nebraska Chapter. Dr. W. Elmer Ekblaw of Clark University will be the principal outside speaker.

Summer travelers in Europe may be interested in attending some of the educational programs prepared under the auspices of the Institute of International Education, 2 West 45th Street, New York City. One of these programs includes courses in geography to be given at the University of Cambridge, July 31 to August 20. Information will be furnished at the New York address.

Formerly, three or four months were required to bring furs from the Mackenzie district to Winnipeg. Last March an airplane brought them there in four days. The flight was a difficult one, the temperature dropping at times to 64° below zero.

"Uncle Sam's Farm" is a new, attractive, three part map project for Grades 5, 6, and 7, prepared by the Quaker Oats Company, School Health Service, 80 East Jackson, Chicago. Part 1 is an outline map of the United States, 44" by 30"; Part 2, a set of colored illustrations depicting the nations' chief grains, animal products, fruits and vegetables; Part 3, a teacher's guide for the use of the project. Sufficient activity is provided for the participation of each member of a class. The project is free to teachers.

ANNOUNCEMENTS

The National Council at Columbus

The next annual meeting of the National Council of Geography Teachers will be held at Ohio State University, Columbus, Ohio, December 27 and 28, 1929, and the meetings of the Association of American Geographers will follow immediately. Preliminary plans are being formulated for a joint field trip. Headquarters will be at the Deshler-Wallick Hotel. The hotel rates are as follows: $3.00 to $8.00 for single rooms with bath, and $5.00 to $10.00 for double rooms with bath. Make your reservations early and be present for all sessions.

The National Council at Geneva, Switzerland

The geography section at the next conference of the World Federation of Education Associations, July 25 to August 3, 1929, will have for its theme "Geographic Aspects of Teaching Internationalism" and will be in charge of Miss Erna Grassmuck, past-president of the National Council. Our official delegates are Miss Alison Aitchison, State Teachers College, Cedar Falls, Iowa, and Miss Harriet Carter, Frick Training School, Pittsburgh, Pennsylvania. The alternates are Miss Edna Gray, State Normal School, Slippery Rock, Pennsylvania, and Miss Alice M. Krackowizer, State Normal School, Salisbury, Maryland.

The National Council at Atlanta

At the July meeting of the National Education Association at Atlanta, Georgia, the National Council will have charge of the Geography Section. The theme will be "The Need for Geographic Mindedness in the Solution of Local, National, and International Problems." The two speakers secured at this date are Dr. A. E. Parkins, George Peabody College for Teachers, Nashville, Tennessee, and Miss Willa Bolton, State Normal School, Hattiesburg, Mississippi.

An Outstanding
Map *of* Australia

Denoyer-Geppert Map J10—Australia and the Pacific Lands
Edited by* GRIFFITH TAYLOR, *University of Chicago

Scale 115 miles to the Inch—Size 44 x 58 inches

Map J10—Australia and the Pacific Lands

The upper section of the map on a scale of 300 miles to the inch, shows all lands bordering the Pacific, making clear the complicated international situation in the Pacific area.

Today the United States imports more from the Pacific Lands than from any other section of the world! And our volume of trade in this area is increasing rapidly. The chief sea routes and the distances between ports stand out distinctly on this new map. Railroads also are shown.

Just as the digging of the Panama Canal made us a world power, so the acquisition of the Philippines made us an Asiatic power. The day when Americans can turn their eyes away from events taking place about the Pacific is past.

The possessions and mandate areas of the leading powers in the Pacific are clearly indicated.

Most school maps show North Australia and Central Australia as one political unit—the Northern Territory—instead of the two as correctly given here.

The topography of the eastern coast of Australia is shown correctly. Most maps represent this as a sharp range of mountains whereas it is a series of worn-down plateaus as presented on Map J10.

The map of Australia is on a scale of 115 miles to the inch, the same as the "J" Maps of North America, South America, and Africa. Important comparisons between these continents are thus made possible.

This latest addition to the Denoyer-Geppert "J" Series of Geography Maps has been edited by Professor Griffith Taylor, D.Sc., until recently of the University of Sydney, Australia, now of the University of Chicago. Prof. Taylor is recognized as the foremost authority on the geography and geology of Australia.

Map J10 is available in all styles of mounting for immediate shipment. ***For prices and further information write to***

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J7	—Eastern Hemisphere	300
J8	—Western Hemisphere	300
J9	—World, Political and Commercial	600
J10	—Australia and the Pacific Lands	115
J11	—Canada, Political and Industrial	75
J131	—New York, Political and Physical	8
J171	—Eastern United States	40
J172	—New England, Physical and Political	8